



# Call for Participation for potential US-collaborators in the area of polymer chemistry:

#### "Wanted":

We would be happy to collaborate with a research group that has expertise in coating formulation, polymer chemistry, lignocellulosic materials or bio-based polymers. We are also interested in collaboration with experts in architecture, building physics and wood construction.





#### **Call for Participation for potential US-collaborators:**

Deadline: April 15th, 2022

The Academy of Finland has two partners in the United States: the National Science Foundation (NSF) and the National Institutes of Health (NIH). The Academy and the American funders have agreed to promote Finnish-American research collaboration in 2020–2024. Cooperation will be strengthened by funding research projects between American and Finnish parties in areas represented by the research flagships included in the Academy's Finnish Flagship Program. The collaboration between the funders follows a lead agency model, with the US-agency reviewing applications and the Academy of Finland providing additional funding for Finnish PIs, thus enlarging the overall possible budget.

To support the utilization of these opportunities the Finnish-American Research & Innovation Accelerator (FARIA) launched in collaboration with the Academy of Finland a light-weight matching and preparatory program for US and Finnish researchers – the FARIAincubator.

#### **FARIAincubator**

The FARIAincubator is a program that encourages the creation of joint project teams and prepares them to apply for funding. The preparation is conducted via a series of four online seminars which aim to share up to date information of the joint Finnish-US calls and coaching by experienced grant writers.

#### Added value for participating researchers:

- Reach new potential collaborators specific to your field of interest
- Qualify for joint Academy of Finland/NIH/NSF funding by partnering
- Stay up to date on funding criteria and application processes
- Increase the quality of your proposal and thereby success chances for funding

#### **How US-colleagues can participate:**

#### 1. Read the short project idea and request for US-expertise:

Finnish researchers submitted a draft research/project idea and description of the kind of collaborator expertise they are looking for. Have a quick look if your interests and expertise are a potential match.





#### 2. Get in touch with the FARIAincubator team:

If interested, send a short email until April 15<sup>th</sup> to the program manager (Dr. Jérôme Rickmann; <u>Jerome.rickmann@aalto.fi</u>) indicating:

- The proposal you are potentially interested in
- A short description of how you fit the searched profile

#### 3. Next steps:

Dr. Rickmann will reach out to you and organize the "matching seminar", which essentially is a zoom-session serving the Finnish PI to present the project proposal in a bit more detail and to discuss the idea with US-colleagues.

#### 4. Program participation:

After the matching seminar participants can freely decide if they want follow the program and to continue to refine the initial ideas together. The participation is at all stages free of cost and no "hard commitment" to proposal submission is expected.

#### The program is structured as follows:

Step 1	Researcher matching seminar	April
Step 2	Academy of Finland Seminar:	28 <sup>th</sup> of April
	Joint calls with NSF and NIH	
Step 3	Grant writing workshop	May/June
Step 4	Joint proposal development/refinement	June-August
Step 5	Academy of Finland Seminar:	August**
	Updates on imminent calls	
Step 6	Submission of proposals	Fall 2022**

<sup>\*\*</sup> Exact dates to be confirmed, depends on the Academy's budget situation and the timing of the next joint calls.





#### **Background of Initiative:**

The state governments of Maine, Michigan, Minnesota, and most recently Washington and Colorado have signed Memoranda of Understanding with Finland to increase collaboration in various areas of mutual interest. Other MoUs are in preparation. Research collaboration is highlighted and encouraged in all of them.

The Finnish-American Research & Innovation Accelerator (FARIA) is a US-focused RDI-network, which integrates, aligns and supports joint and associated actions of its Finnish member higher education institutions. FARIA comprises 16 Finnish higher education institutions - representing 92 % of Finnish research universities, and 89 % of the Finnish HE sector's RDI-power (measured in RDI funding).

FARIA is financed by the Finnish Ministry of Education and Culture and collaborates closely with the Finnish Ministry of Foreign Affairs to strengthen Finnish-US RDI-relationships.

FARIA is jointly coordinated by Aalto University and the University of Helsinki.

www.faria.network

USA - Academy of Finland (aka.fi)





### **Proposal:**

Consent: By submitting the form you consent that we share the here compiled information with academic institutions in the USA in order to find suitable colleagues for your idea.

#### Your research project idea?

The main aim of the project is to discover renewable materials or compounds for enhancing the long-term durability of timber products. The motivation for the work is in promotion of timber in construction of buildings enabled by safe, high performing and renewable coatings and treatments.

The materials utilized in buildings and other constructs are exposed to varying environmental stresses depending on their location, lifetime, maintenance etc. Wood is a long-lasting material whose life cycle should be considered critically and lifetime in use should be extended to be as long as possible. Maintaining the functionality, safety and aesthetics of wood in a building, requires treatment of the wooden surfaces that prevent unwanted physical, chemical or biological changes depending on the exposure they are subjected to also considering the related regulations. A possible source for high performing functional components for enhancing the endurance of timber are side stream biomasses, such as wood barks, since they contain chemicals and functionalities that play a role in enabling the long lifetime of trees.

HAMK's main activities in the project relate to extraction and processing of functional components from biomasses and testing the performance of the coated or otherwise treated wooden specimens or products. We have capability to carry out accelerated weathering studies and to build testing set-ups with various climate scenarios. The size scale for studied samples varies from small pieces to large elements.

#### What (complementary) expertise are you looking for from US-partner?

We would be happy to collaborate with a research group that has expertise in coating formulation, polymer chemistry, lignocellulosic materials or bio-based polymers. We are also interested in collaboration with experts in architecture, building physics and wood construction.

## Which information you want the US-colleague to have about your expertise/background?

My name is Päivi Laaksonen and I work as a Principal research scientist at HAMK. I am responsible of the Materials research area at HAMK Tech and also lead the Long-Term Durability Research Group. I have obtained a PhD in physical chemistry 2008, have published 55 papers that have been cited 2303 times (H-index 23). My ORCID is 0000-0003-2029-5275